

ICOM

OPTIONS GUIDE

AMATEUR PRODUCTS



Icom Inc.



HF TRANSCEIVER OPTIONS

Transceivers	Options									
	Voice synthesizer units	Tone encoder unit	AM/FM unit	Electronic keyer unit	High-stability crystal units	CI-V Systems	Handles	Mounting brackets	Desktop microphones	Hand microphone
IC-781										
IC-765										
IC-728	*2									
IC-725	*2									
IC-729	*2									
IC-726	*2									
IC-735	*2									
IC-751A	*2	*2	*2	*2	*4	*5	*4	*2	*4	*6

*1 The same type as supplied with the transceiver.

*2 Style and size are matched with the transceiver.

*3 An optional OPC-118 cable is required.

*4 An optional OPC-137 cable is required.

*5 Optional OPC-137 cable and UX-14 are required.

*6 Can be used with the AH-2a or AH-3.

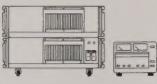
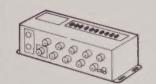
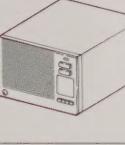
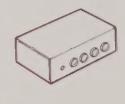
*7 An optional UX-14 is required.

: Applicable

: Not applicable

HF ALL BAND TRANSCEIVERS

- IC-781
- IC-765
- IC-728
- IC-725
- IC-729
- IC-726
- IC-735
- IC-751A

IC-4KL 1 kW HF LINEAR AMPLIFIER	AH-2a, AH-3 HF AUTOMATIC ANTENNA TUNERS	AT-160 HF AUTOMATIC ANTENNA TUNER	EX-627 HF AUTOMATIC ANTENNA SELECTOR	PS-55 DC POWER SUPPLY
				
Advanced all-solid-state linear amplifier equipped with a fully automatic antenna tuner.	Allow HF operation in apartments, condos or for mobile operations.	Automatically matches your IC-728 or IC-729 to an antenna system.	Automatically selects the most suitable antenna from up to 7 antennas.	DC power supply for Icom HF transceivers. 13.8 V DC, 20 A.
SM-8 DESKTOP MICROPHONE	SM-20 DESKTOP MICROPHONE	SP-7 EXTERNAL SPEAKER	SP-20 EXTERNAL SPEAKER WITH AUDIO FILTERS	CT-17 CI-V LEVEL CONVERTER
				
Up/down switches are included. Can be connected to 2 Icom transceivers.	High-quality microphone with a heavy, stable base.	External speaker for base station operation. 8 Ω, 5 W.	High performance speaker with audio filters. 8 Ω, 5 W.	For remote control using a personal computer equipped with an RS-232C port.

■ DC POWER SUPPLIES

- IC-PS15 DC POWER SUPPLY For base station use.

Output voltage: 13.8 V DC
Max. current: 20 A

- IC-PS30 DC POWER SUPPLY System power supply. Equipped with 3 output connectors.

Output voltage: 13.8 V DC
Max. current: 25 A

- IC-PS35 INTERNAL POWER SUPPLY Built-in type power supply for the IC-751A. Output voltage: 13.8 V DC
Max. current: 20 A

■ SPEAKER

- IC-SP3 EXTERNAL SPEAKER Designed for base station operation. 8 Ω, 4 W.

■ LINEAR AMPLIFIER

- IC-2KL 500 W LINEAR AMPLIFIER Advanced all-solid-state linear amplifier.

■ ANTENNA TUNERS AND ANTENNA

- AT-150, IC-AT500 HF AUTOMATIC ANTENNA TUNERS

AT-150: Automatically matches your Icom HF transceiver to an antenna system.

Max. input power: 150 W

IC-AT500: Most suitable for the IC-2KL.

Max. input power: 500 W

- AH-2b ANTENNA ELEMENT 2.5 m (8.2 ft) stainless steel antenna element for 3.5~28 MHz mobile operation.

■ MICROPHONES

- SM-6 DESKTOP MICROPHONE Easy-to-use desk-top microphone for base station operation.

- HM-12 HAND MICROPHONE Hand microphone with up/down switches for scanning.

■ CI-V SYSTEMS

• CT-16 SATELLITE INTERFACE UNIT

Allows easy tuning for satellite communications using another Icom transceiver.

- UX-14 CI-IV/CI-V CONVERTER Allows you to use the CI-V System for the IC-751A.

■ INTERNAL UNITS

- CR-64, CR-282 HIGH-STABILITY CRYSTAL UNITS Provide improved frequency stability. ± 100Hz

(-30°C ~ +60°C; -22°F ~ +140°F)

- IC-EX243 ELECTRONIC KEYER UNIT Allows fast and efficient CW contacts.

- EX-310 VOICE SYNTHESIZER UNIT An electronically generated voice announces the displayed frequency in English.

- UI-7 AM-FM UNIT AM transmit, FM transmit/receive unit for the IC-728 and IC-725.

- UT-30 PROGRAMMABLE TONE ENCODER UNIT Allows you to access a repeater that requires a subaudible tone.

- UT-36 VOICE SYNTHESIZER UNIT A clear, electronically-generated voice announces the displayed frequency in English or Japanese.

■ BRACKETS AND HANDLES

- IC-MB5, IC-MB12, MB-18 MOBILE MOUNTING BRACKETS Transceiver brackets for mobile operation.

- MB-19 RACK MOUNTING HANDLES Transceiver mounting handle for a 19-inch mounting rack.

- MB-23 CARRYING HANDLE Carrying handle for easy portable operation.

FILTERS

	Center frequency	Passband width	IC-781	IC-765	IC-728 IC-725 IC-729 IC-726	IC-735	IC-751A
FL-52A	455 kHz	500 Hz / -6 dB	Built-in	Built-in			Either
FL-53A		250 Hz / -6 dB	Built-in				
FL-32A		500 Hz / -6 dB	Built-in	Built-in		Either	Built-in
FL-63A		250 Hz / -6 dB					*2
FL-100	9.0106 MHz	500 Hz / -6 dB					
FL-101		250 Hz / -6 dB	Built-in		Either		
FL-102	9.0100 MHz	6.0 kHz / -6 dB	Built-in				
FL-103	9.0115 MHz	2.8 kHz / -6 dB	*1				

*1 Replaces built-in FL-102.

*2 Replaces built-in FL-32A.

: Applicable

: Not applicable



ALL MODE TRANSCEIVER OPTIONS

Transceivers	Options					
	Receiver unit	2400 MHz band unit	1200 MHz band unit	Voice synthesizer unit	Tone squelch unit	Electronic keyer unit
IC-970A/E/H						UX-R96
IC-575A/H	*2	*2	*2			UX-98
IC-275A/E/H	*2	*2	*2			UX-97
IC-375A					UT-36	
IC-475A/E/H	*2	*2	*2			UT-34
IC-1275A/E						*6

*1 A hand microphone is already supplied with the transceiver.

*2 For "H" versions only. A DC power supply is already built into "A/E" versions.

*3 Style and size are matched with the transceiver.

*4 When an optional UX-R96 is installed.

*5 When an optional UX-97 is installed.

*6 Up to two UT-34's can be installed.

: Applicable

: Not applicable

VHF/UHF ALL MODE TRANSCEIVERS

IC-970A/E/H

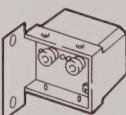
IC-575A/H

IC-275A/E/H

IC-375A

IC-475A/E/H

IC-1275A/E

AG-25, AG-35, AG-1200 WEATHERPROOF PREAMPLIFIERS	CT-16 SATELLITE INTERFACE UNIT	CT-17 CI-V LEVEL CONVERTER	PS-55 DC POWER SUPPLY	AH-7000 SUPER WIDEBAND OMNIDIRECTIONAL ANTENNA
				
Mast-mount preamplifiers for compensating for coaxial cable loss.	Easy tuning for instant satellite communications.	For remote control using a personal computer.	DC power supply for Icom all mode transceivers.	Super wide frequency coverage. 25~1300 MHz.
SP-7 EXTERNAL SPEAKER	SP-20 EXTERNAL SPEAKER WITH AUDIO FILTERS	SM-6 DESKTOP MICROPHONE	SM-8 DESKTOP MICROPHONE	SM-20 DESKTOP MICROPHONE
				
External speaker for base station use. 8 Ω, 5 W.	High performance speaker with audio filters. 8 Ω, 5 W.	Easy-to-use electret condenser-type microphone.	Up/down switches are included. Can be used with 2 Icom transceivers.	High-quality microphone with a heavy, stable base.

■ DC POWER SUPPLIES

- IC-PS15 DC POWER SUPPLY

Output voltage: 13.8 V DC

Max. current: 20 A

- IC-PS30 DC POWER SUPPLY Equipped with 3 output connectors.

Output voltage: 13.8 V DC

Max. current: 25 A

■ SPEAKER

- IC-SP3 EXTERNAL SPEAKER Designed for base station operation. 8 Ω, 4 W.

■ MICROPHONE

- HM-12 HAND MICROPHONE Equipped with up/down switches.

■ BRACKETS AND HANDLES

- IC-MB5 MOBILE MOUNTING BRACKET Transceiver bracket for mobile operation.

- MB-19 RACK MOUNTING HANDLES Transceiver mounting handles for a 19-inch mounting bracket.

- MB-23 CARRYING HANDLE Carrying handle for easy portable operation.

■ ATV ADAPTER

- TV-1275 ATV ADAPTER Allows advanced ATV (amateur television) operation.

■ ANTENNA SELECTOR

- EX-20 AUTOMATIC ANTENNA SELECTOR Selects a 28 or 50 MHz antenna synchronized with the IC-575A/H.

■ INTERNAL UNITS

- CR-64, CR-263, CR-293 HIGH-STABILITY CRYSTAL UNITS Provide improved frequency stability.

Frequency stability: ±0.5 ppm
(-30°C~+60°C; -22°F~+140°F)

- IC-EX243 ELECTRONIC KEYER UNIT Provides electronic keyer operation.

- UT-34 TONE SQUELCH UNIT Provides a "personalized" squelch system with other stations.

- UT-36 VOICE SYNTHESIZER UNIT An electronically generated voice announces the displayed frequency in English or Japanese.

■ RECEIVER AND BAND UNITS

- UX-R96 RECEIVER UNIT Adds 50~905 MHz continuous receiver capability.

Modes: FM, wide FM, AM

- UX-97 1200 MHz BAND UNIT Adds all-mode operation on the 1200 MHz band.

Modes: SSB, CW, FM

Output power: 10 W

- UX-98 2400 MHz BAND UNIT Adds all-mode operation on the 2400 MHz band.

Modes: SSB, CW, FM

Output power: 1 W

FILTERS

	Center frequency	Passband width	IC-970A/E/H	IC-575A/H	IC-275A/E/H IC-1275A/E	IC-375A IC-475A/E/H
FL-32A		500 Hz/-6 dB				
FL-100	9.0106 MHz	500 Hz/-6 dB				
FL-101		250 Hz/-6 dB		Either		
FL-102	9.0100 MHz	6.0 Hz/-6 dB				
FL-83	10.7491 MHz	500 Hz/-6 dB				
FL-132	10.8491 MHz	500 Hz/-6 dB	*1			
FL-133	10.9491 MHz	500 Hz/-6 dB	*2			

*1 For MAIN band.

*2 For SUB band.

 : Applicable

 : Not applicable



MOBILE TRANSCEIVER OPTIONS

*1 A hand microphone is already supplied with each transceiver.
Appearances may differ from the supplied microphone.

*2 For "A/E" versions only. An optional OPC-102 DC POWER CABLE is required.

*3 Up to two UT-40's can be installed.

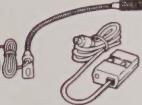
*4 Already installed in the U.S.A. version.

: Applicable

: Not applicable

MOBILE TRANSCEIVERS

- IC-901A/E
- IC-2410A/E/H
- IC-2400A/E
- IC-3230A/E/H
- IC-3220A/E/H
- IC-2500A/E
- IC-229A/E/H
- IC-228A/E/H
- IC-28H
- IC-38A
- IC-449A/E
- IC-1201A/E

AH-32 + AHB-32 MOBILE ANTENNAS AND TRUNK MOUNTS	HM-56/A, HM-58, HM-59, HAND MICROPHONES	HS-15 + HS-15SB MOBILE FLEXIBLE MICROPHONE AND SWITCHBOX	IC-PS30 DC POWER SUPPLY	PS-45 DC POWER SUPPLY
				
For 144/430 (440) MHz mobile operation.	HM-56/A has 14 DTMF code channels. HM-56/A and HM-59 have a 1750 Hz tone call function.	For all-around mobile operation.	Equipped with 3 output connectors. 13.8 V DC, 25 A.	For base station use. 13.8 V DC, 8A.
SP-7 EXTERNAL SPEAKER	SP-10 EXTERNAL SPEAKER	SP-12 EXTERNAL SPEAKER	EX-767 POWER CABLE CONNECTOR BOX	EX-766 INTERFACE UNIT
				
For base station operation. 8 Ω, 5 W.	Compact and easy to install. 4 Ω 5 W.	Can be installed on a sun visor, dashboard, etc. 8 Ω, 3 W.	Provides DC power to optional band units.	Gives you independent IC-901A/E control using a separate remote controller.

■ OPTICAL FIBER CABLE

- OPC-189 OPTICAL FIBER CABLE Allows you 20 m (65.6 ft) separate installation of your IC-901A/E remote controller and band units.

■ MICROPHONES

- SM-6 DESKTOP MICROPHONE Easy-to-use microphone for base station operation.
- SM-8 DESKTOP MICROPHONE Can be connected to 2 Icom transceivers.
- SM-20 DESKTOP MICROPHONE High-quality microphone with a heavy, stable base.

■ INTERNAL UNITS

- UT-28 DIGITAL CODE SQUELCH UNIT Digital code system that ensures a "personalized" squelch system with other stations.

- UT-29, UT-40, UT-50, UT-67 TONE SQUELCH UNITS Provide a "personalized" squelch system with other stations.

- UT-48, UT-55 DTMF ENCODER/DECODER UNITS Enables you to operate the pager and code squelch functions. For the IC-2410A/E/H and IC-3230A/E/H with the HM-56, the UT-55 also provides remote control operation.

- UT-51 PROGRAMMABLE TONE ENCODER UNIT Allows you to access a repeater that requires a subaudible tone.

- UT-66 VOICE SYNTHESIZER UNIT Announces the displayed frequency in English or Japanese.

■ BRACKETS

- MB-21 REMOTE CONTROLLER BRACKET Allows mounting the remote controller on a sun visor. Viewing angle is adjustable.
- MB-31 BAND UNIT STACKING BRACKET For stacking optional band units for the IC-901A/E.
- MB-32 MOBILE MOUNTING BRACKET For separating and installing the IC-901A/E system.
- MB-34 JOINT PLATES For stacking the IC-229 series transceiver.

• IC-901A/E BAND UNITS AND RECEIVER UNIT

Band unit	Band (MHz)	Mode	Output power	
			High	Low
UX-19A/E	28	FM	10 W	1 W
UX-59A	50	FM	10 W	1 W
UX-39A	220	FM	25 W	5 W
UX-129A/E	1200	FM	10 W	1 W
UX-R91A/E	See below		Receive only.	
UX-S92A/E	144	SSB, CW	25 W	5 W

UX-R91A/E's band and mode

520~1630 kHz/AM	137~236 MHz/FM
76~ 108 MHz/Wide FM	300~500 MHz/FM
108~ 137 MHz/AM	800~950 MHz/FM

• IC-901A/E EXPANSION INSTALLATION

By adding the following options, your IC-901A/E gives you a variety of installation choices.

Installation style	Additional band units	Type of control cable	Required option				
			EX-766	EX-767	MB-21	MB-31	MB-32
1-body	1	Unnecessary					
	2 or more	Unnecessary					Either
Separate installation	None	Supplied 3.5 m (11.5 ft) cable 5 m (16.4 ft) optical fiber cable*					
	1	Supplied 3.5 m (11.5 ft) cable 5 m (16.4 ft) optical fiber cable*					
	2 or more	Supplied 3.5 m (11.5 ft) cable 5 m (16.4 ft) optical fiber cable*					Either

 : Required

 : Acceptable

 : Not applicable

* Supplied with an optional EX-766 INTERFACE UNIT. For 20 m (65.6 ft) separate installation, an optional OPC-189 OPTICAL FIBER CABLE is available.



"P" SERIES TRANSCEIVER OPTIONS

Transceivers	Options					
IC-P2A/E					UT-51	
IC-P2AT/ET					UT-50	*2
IC-P3AT					UT-49	*2
IC-P4A/E					MB-48	*1
IC-P4AT/ET					HS-51	*1
Internal units						*3
Mounting bracket						*3
Belt clip						*2
Earphone						*2
Headset						*3
Speaker-microphones						*1
HM-9						*1
HM-46						*1
HM-54						*2
HM-51						*2
Flexible antennas						*2
FA-430BD						*3
FA-215BB						*3
Cables						*2
OPC-254						*3
CP-12						*3
BP-114						*3
BP-113						*3
BP-112						*3
Battery packs						*3
BP-111						*3
BP-110						*3
Battery case						*3

*1 The same type as supplied with the transceiver.

*2 For installation and operation, refer to "Tech Talk" which is available from your Icom Dealer.

*3 Already installed in the U.S.A. version.

: Applicable

: Not applicable

"P" SERIES HANDHELD TRANSCEIVERS

IC-P2A/E
IC-P2AT/ET
IC-P3AT
IC-P4A/E
IC-P4AT/ET

BC-80 DESKTOP CHARGER	BC-73E/D WALL CHARGER	BC-74A/E/D/V WALL CHARGER	CP-12 CIGARETTE LIGHTER CABLE WITH NOISE FILTER	OPC-254 DC POWER CABLE
				
Rapidly charges the BP-111~BP-114. Both AC and DC can be used.	Regularly charges the BP-111. Available in Europe and Asia only.	Regularly charges the BP-111~BP-114 and BP-110 with NiCd batteries.	Allows you to use your transceiver through a 12 V cigarette lighter socket.	For operating the transceiver or charging a battery pack.
HM-9 SPEAKER- MICROPHONE	HM-46 SPEAKER- MICROPHONE	HM-54 SPEAKER- MICROPHONE	HS-51 HEADSET	MB-30 MOUNTING BRACKET
				
Combination speaker and microphone.	Combination speaker and microphone. Equipped with an ear-phone jack.	Combination speaker and microphone	Includes VOX function, PTT and "one touch PTT."	For mounting your transceiver in a vehicle or to a wall.

FLEXIBLE ANTENNAS

- FA-140BF 144 MHz FLEXIBLE ANTENNA
- FA-215BB 220 MHz FLEXIBLE ANTENNA
- FA-430BD 430 (440) MHz FLEXIBLE ANTENNA

INTERNAL UNITS

- UT-49* DTMF DECODER UNIT Provides pager and code squelch functions with DTMF codes.
- UT-50* TONE SQUELCH UNIT Already installed in the U.S.A. version. Provides pocket beep, tone squelch and programmable tone encoder functions.

- UT-51* PROGRAMMABLE TONE ENCODER UNIT Allows you to access a repeater requiring a subaudible tone.

* For installation and operation of the IC-P2A/E or IC-P4A/E, refer to "Tech Talk" which is available from your Icom Dealer.

OTHER OPTIONS

- SP-13 EARPHONE Provides clear receive audio in noisy environments.

- MB-48 BELT CLIP

BATTERY PACKS AND BATTERY CASE

*Can be charged when NiCd batteries are installed.

	Output voltage	Battery capacity	Height
BP-110*	Battery case for R6 (AA) × 6	56.2 mm; 2.2 in	
BP-111	7.2 V	400 mAh	34.5 mm; 1.4 in
BP-112	7.2 V	700 mAh	56.2 mm; 2.2 in
BP-113	7.2 V	1200 mAh	73.0 mm; 2.9 in
BP-114	12.0 V	400 mAh	73.5 mm; 2.9 in

BATTERY CHARGERS AND CHARGING TIMES

*1 When NiCd batteries are installed.

*2 Available in Asia and Europe only.

N/A: Not applicable.

	BP-110	BP-111	BP-112	BP-113	BP-114
BC-73E/D* ²	N/A	15 hrs.	N/A	N/A	N/A
BC-74A/E/D/V	15 hrs.* ¹	15 hrs.	15 hrs.	15 hrs.	15 hrs.
BC-80	N/A	1 hr.	1 hr.	1.5 hrs.	2 hrs.
CP-12 OPC-254	15 hrs.* ¹	15 hrs.	15 hrs.	15 hrs.	15 hrs.

CARRYING CASES

	IC-P2A/E IC-P4A/E	IC-P2AT/ET IC-P3AT IC-P4AT/ET
BP-110	LC-95	LC-92
BP-111	LC-94	LC-91
BP-112	LC-95	LC-92
BP-113	LC-96	LC-93
BP-114	LC-96	LC-93



"SR/W/X" SERIES TRANSCEIVER OPTIONS

	Options	Transceivers	IC-2SRA/SRE	IC-4SRA/SRE	IC-W2A/E	IC-X2A/E	Other options
Flexible antennas			FA-1443B	FA-1443BB	FA-4312BA	HM-65	BA-11
Tone squelch unit							AD-20
Belt clip							UT-63
Mounting bracket							MB-30
Earphone							SP-13
Headset							HS-60
Speaker-microphones							HM-70

*1 The same type as supplied with the transceiver.

*2 Either a battery pack or battery case is supplied with the transceiver.

*3 The FA-1443B is the same type as supplied with the U.S.A. version. The FA-1443BB is the same as type supplied with other versions.

*4 Already installed in the U.S.A. version.

*5 An option for the BP-81~BP-84 and BP-90. The BC-77A/E/D/V, BC-78E/D CP-13 or OPC-288 is required.

■ : Applicable
■ : Not applicable

"SR/W/X" SERIES HANDHELD TRANSCEIVERS

IC-2SRA/SRE

IC-4SRA/SRE

IC-W2A/E

IC-X2A/E

BC-72 DESKTOP CHARGER	BC-80 DESKTOP CHARGER	BC-77A/E/D/V WALL CHARGERS	CP-13 CIGARETTE LIGHTER CABLE WITH NOISE FILTER	AD-20 BATTERY CHARGE ADAPTER
				
Rapidly charges the BP-81~BP-85. Both AC and DC can be used.	Rapidly charges the BP-81~BP-85. Also charges the BP-111~BP-114 for "P" series.	Regularly charges the BP-81~BP-84 and BP-90 with NiCd batteries.	Allows you to use your transceiver through a 12 V cigarette lighter socket.	Allows you to charge the BP-81~BP-84 and BP-90 with NiCd batteries.
HM-65 SPEAKER- MICROPHONE	HM-70 SPEAKER- MICROPHONE	HS-60 HEADSET	SP-13 EARPHONE	MB-30 MOUNTING BRACKET
				
Combination speaker and microphone. Equipped with an earphone jack.	Combination speaker and microphone.	Includes VOX function, PTT and "one touch PTT." Equipped with 2 earphones.	Provides you with clear receive audio in noisy environments.	For mounting your transceiver in a vehicle or to a wall.

FLEXIBLE ANTENNAS

- AH-20 WIDEBAND FLEXIBLE ANTENNA Receiving only.
- FA-140BB 144 MHz FLEXIBLE ANTENNA
- FA-430BB 430 (440) MHz FLEXIBLE ANTENNA
- FA-1443B, FA-1443BB 144/430 (440) MHz DUAL BAND FLEXIBLE ANTENNAS
- FA-4312BA 430 (440)/1200 MHz DUAL BAND FLEXIBLE ANTENNA

OTHER OPTIONS

- BC-74E/D WALL CHARGER Regularly charges the BP-85 through the charging jack on the BP-85.
- BC-78E/D WALL CHARGER Regularly charges the BP-81 and BP-82.
- BA-11 BOTTOM CAP Protect bottom terminals when using an external DC power supply without a battery pack.
- MB-48 BELT CLIP
- OPC-288 DC POWER CABLE For operating the transceiver. Also charges the BP-81~BP-84 and BP-90 with NiCd batteries.
- UT-63 TONE SQUELCH UNIT Already installed in the U.S.A. version. Provides pocket beep, tone squelch and programmable tone encoder functions. Contains separate circuits for each band.

BATTERY PACKS AND BATTERY CASE

* Can be charged when NiCd batteries are installed.

	Output voltage	Battery capacity	Height
BP-81	7.2 V	110 mAh	30.0 mm; 1.2 in
BP-82	7.2 V	400 mAh	40.0 mm; 1.6 in
BP-83	7.2 V	700 mAh	59.5 mm; 2.3 in
BP-84	7.2 V	1200 mAh	76.0 mm; 3.0 in
BP-85	12.0 V	340 mAh	76.0 mm; 3.0 in
BP-90*	Battery case for R6 (AA) × 6		
			59.5 mm; 2.3 in

BATTERY CHARGERS AND CHARGING TIMES

*1 When NiCd batteries are installed.

*2 Available in Asia and Europe only.
N/A: Not applicable.

	BP-81	BP-82	BP-83	BP-84	BP-85	BP-90
BC-72 BC-80	1 hr.	1 hr.	1 hr.	1 hr.	1.5 hrs.	N/A
BC-74A/E/D/N	N/A	N/A	N/A	N/A	15 hrs.	N/A
BC-77A/E/D/N	15 hrs.	15 hrs.	15 hrs.	15 hrs.	N/A	15 hrs. *1
BC-78E/D*2	15 hrs.	15 hrs.	N/A	N/A	N/A	N/A
CP-13 OPC-288	15 hrs.	15 hrs.	15 hrs.	15 hrs.	N/A	15 hrs. *1

CARRYING CASES

	IC-2SRA/SRE IC-W2A/E	IC-4SRA/SRE IC-X2A/E
BA-11		LC-71
BP-81		LC-71
BP-82		LC-72
BP-83		LC-72
BP-84		LC-73
BP-85		LC-73
BP-90		LC-72



"S" SERIES TRANSCEIVER OPTIONS

*1 The same type as supplied with the transceiver.

*2 The BP-82 or BP-90 is already supplied with the transceiver.

*3 The FA-1443B is the same type as supplied with the U.S.A. version. The FA-1443BA is the same type as supplied with other versions.

*4 Except for full duplex operation.

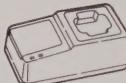
- * Except for full duplex operation.
- * For installation and operation, refer to "Tech Talk" which is available from your Icom Dealer.

*6 An option for the BP-81~BP-84 and BP-90. The BC-73E/D, BC-74A/E/D/V, CP-12 or OPC-254 is required.

 : Applicable
 : Not applicable

“S” SERIES HANDHELD TRANSCEIVERS

IC-2SA/SE
IC-2SAT/SET
IC-3SAT
IC-4SA/SE
IC-4SAT/SET
IC-24AT/ET

BC-80 DESKTOP CHARGER	BC-72 DESKTOP CHARGER	CP-12 CIGARETTE LIGHTER CABLE WITH NOISE FILTER	HM-9 SPEAKER-MICROPHONE	HM-46 SPEAKER-MICROPHONE
				
Rapidly charges BP-81~BP-85 and BP-111~BP-114. Both AC and DC can be used.	Rapidly charges BP-81~BP-85. Both AC and DC can be used.	Allows you to use your transceiver through a 12 V cigarette lighter socket.	Combination speaker and microphone.	Combination speaker and microphone. Equipped with an ear-phone jack.
HM-54 SPEAKER-MICROPHONE	HS-51 HEADSET	AD-14 BATTERY CHARGE ADAPTER	MB-30 MOUNTING BRACKET	BA-12 BATTERY CHARGE ADAPTER
				
Combination speaker and microphone.	Includes VOX function, PTT and “one touch PTT.”	Allows you to charge BP-81~BP-84 and BP-90 with NiCd batteries.	For mounting your transceiver in vehicle or to a wall.	For charging “SAT/SET” internal batteries with BC-72 or BC-80.

BATTERY PACKS AND BATTERY CASE

* Can be charged when NiCd batteries are installed.

	Output voltage	Battery capacity		Height
BP-81	7.2 V	110 mAh	30.0 mm; 1.2 in	
BP-82	7.2 V	300 mAh	40.0 mm; 1.6 in	
BP-83	7.2 V	600 mAh	59.5 mm; 2.3 in	
BP-84	7.2 V	1000 mAh	76.0 mm; 3.0 in	
BP-85	12.0 V	340 mAh	76.0 mm; 3.0 in	
BP-90*	Battery case for R6 (AA) × 6		59.5 mm; 2.3 in	

BATTERY CHARGERS AND CHARGING TIMES

*1 When NiCd batteries are installed.

*2 Available in Asia and Europe only.

*3 The BA-12 is required.
N/A: Not applicable

	“SAT/SET” internal batteries	BP-81	BP-82	BP-83	BP-84	BP-85	BP-90
BC-72 BC-80	1 hr.* ³	1 hr.	1 hr.	1 hr.	1 hr.	1.5 hr.	N/A
BC-73E/D* ²	15 hrs.	15 hrs.	15 hrs.	N/A	N/A	N/A	N/A
BC-74A/E/D/N	15 hrs.	15 hrs.	15 hrs.	15 hrs.	15 hrs.	15 hrs.	15 hrs.* ¹
CP-12 OPC-254	15 hrs.	15 hrs.	15 hrs.	15 hrs.	15 hrs.	15 hrs.	15 hrs.* ¹

CARRYING CASES

	IC-2SA/SE IC-4SA/SE	IC-2SAT/SET IC-3SAT IC-4SAT/SET	IC-24AT/ET
BA-11	LC-53	LC-57	LC-63
BP-81	LC-53	—	LC-63
BP-82	LC-55	LC-59	LC-65
BP-83	LC-55	LC-59	LC-65
BP-84	LC-56	LC-61	LC-66
BP-85	LC-56	LC-61	LC-66
BP-90	LC-55	LC-59	LC-65

- **FLEXIBLE ANTENNAS**
 - FA-140BB 144 MHz FLEXIBLE ANTENNA
 - FA-215BA 220 MHz FLEXIBLE ANTENNA
 - FA-430BB 430 (440) MHz FLEXIBLE ANTENNA
 - FA-1443B, FA-1443BB 144/430 (440) MHz DUAL BAND FLEXIBLE ANTENNAS

■ INTERNAL UNITS

- UT-49* DTMF DECODER UNIT Ensures you pager and code squelch functions.
- UT-50* TONE SQUELCH UNIT Provides a “personalized” squelch system with other stations. Also functions as a programmable tone encoder.
- UT-51* PROGRAMMABLE TONE ENCODER UNIT Allows you to access a repeater requiring a subaudible tone.

* For installation and operation of the IC-2SA/SE or IC-4SA/SE, refer to “Tech Talk” which is available from your Icom Dealer.

■ OTHER OPTIONS

- BA-11 BOTTOM CAP Protects bottom terminals when using an external power supply. The same type as supplied with the “SAT/SET” series.
- MB-48 BELT CLIP
- OPC-254 DC POWER CABLE For operating the transceiver or charging a battery pack or “SAT/SET” internal batteries.
- SP-13 EARPHONE Provides clear receive audio in noisy environments.



HANDHELD TRANSCEIVER OPTIONS

Transceivers	Options	Other options										
		ST-10	BA-10	AD-12	UT-40	MB-22	MB-25	MB-24	MB-16D	SP-13	HS-51	Alligator clip
IC-2GA/GAT/GE	*2											
IC-02A/AT/E	*2	*2										
IC-2A/AT/E	*2											
IC-03AT	*2											
IC-4GAT/GE	*2											
IC-04AT/E	*2											
IC-12GAT/GE	*2											
IC-32A/AT/E	*2											

*1 The same type as supplied with the transceiver.

*2 The BP-3, BP-4, BP-7 or BP-70 is already supplied with the transceiver.

*3 An option for the BP-3, BP-5A, BP-7 and BP-70.

*4 An optional DC-1 is required.

*5 Except for full duplex operation.

*6 Except for the IC-2GE, IC-4GE and IC-12GE.

*7 An earphone is already supplied with the transceiver.

: Applicable
: Not applicable

HANDHELD TRANSCEIVERS

IC-2GA/GAT/GE

IC-02A/AT/E

IC-2A/AT/E

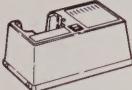
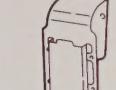
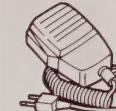
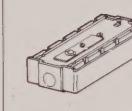
IC-03AT

IC-4GAT/GE

IC-04AT/E

IC-12GAT/GE

IC-32A/AT/E

BC-35, BC-36 DESKTOP CHARGERS	CP-10 BATTERY SEPARATION CABLE	CP-11 CIGARETTE LIGHTER CABLE WITH NOISE FILTER	MB-16 MOBILE MOUNTING BRACKET MB-24 MOUNTING BRACKET (Hanger-type)	MB-16D WALL BRACKET MB-25 MOUNTING BRACKET (Wall-type)
				
Rapidly charges the BP-2, BP-5, BP-5A, BP-7 and BP-8. Regularly charges the BP-3 and BP-70.	For separating a hand-held from the battery pack.	Allows you to use your transceiver through a 12 V cigarette lighter socket.	Transceiver bracket for mobile operation.	For placing your transceiver in a convenient location.
HS-51 HEADSET	HM-9, HM-9L SPEAKER-MICROPHONES	HM-46, HM-46L SPEAKER-MICROPHONES	HM-54 SPEAKER-MICROPHONE	AD-12 EXTERNAL POWER ADAPTER
				
Includes VOX function, PTT switch and "one touch PTT."	Combination speaker and microphone.	Combination speaker and microphones. Equipped with an ear-phone jack.	Combination speaker and microphone.	For using a 13.8 V DC power source with your "G" series transceiver.

BATTERY PACKS AND BATTERY CASE

BATTERY CHARGER AND CHARGING TIMES

*When NiCd batteries are installed.
N/A: Not applicable.

	Output voltage	Battery capacity		Height
BP-2	7.2 V	450 mAh	39.0 mm; 1.5 in	
BP-3	8.4 V	270 mAh	39.0 mm; 1.5 in	
BP-4	Battery case for R6 (AA) × 6		49.0 mm; 1.9 in	
BP-5	10.8 V	450 mAh	56.0 mm; 2.2 in	
BP-5A	10.8 V	450 mAh	80.0 mm; 3.1 in	
BP-7	13.2 V	450 mAh	80.0 mm; 3.1 in	
BP-8	8.4 V	800 mAh	80.0 mm; 3.1 in	
BP-70	13.2 V	270 mAh	60.5 mm; 2.4 in	

	BP-2	BP-3	BP-4	BP-5	BP-5A	BP-7	BP-8	BP-70
BC-16U/E	N/A	N/A	N/A	N/A	15 hrs.	15 hrs.	15 hrs.	9 hrs.
BC-17								
BC-18								
BC-25U/E	N/A	15 hrs.	N/A	N/A	N/A	N/A	N/A	N/A
BC-26E								
BC-27								
BC-35	1.5 hrs.	15 hrs.	15 hrs.*	1.5 hrs.	1.5 hrs.	1.5 hrs.	3 hrs.	9 hrs.
BC-36								
CP-1	N/A	15 hrs.	N/A	N/A	15 hrs.	15 hrs.	15 hrs.	9 hrs.
CP-11								

CARRYING CASES

	IC-02A/AT/E IC-03AT IC-04AT/E	IC-2GA/GE IC-4GA/GE IC-12GE	IC-2GAT IC-4GAT IC-12GAT	IC-32A/AT/E
BP-2	LC-11	LC-35	LC-38	LC-41
BP-3	LC-11	LC-35	LC-38	LC-41
BP-4	LC-11	LC-35	LC-38	LC-41
BP-5	—	—	LC-39	LC-42
BP-5A	LC-14	LC-37	LC-40	LC-43
BP-7	LC-14	LC-37	LC-40	LC-43
BP-8	LC-14	LC-37	LC-40	LC-43
BP-70	—	—	LC-39	LC-42

OPTIONS GUIDE AMATEUR PRODUCTS

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